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Executive Summary of Section 208 Program for Designated Areas. Federal Water Pollution Control Act Amendments of 1974

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EXECUTIVE SUMMARY OF SECTION 208 PROGRAM FOR DESIGNATED AREAS

FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

U. S. ENVIRONMENTAL PROTECTION AGENCY
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This Summary is intended to provide a brief review of major elements of the 208 water pollution control program. It consists of four parts. Part 1, Program Overview, provides a brief discussion of the program's goal, its applicability to specific problems and areas, and its major features. Part 2, Issues, briefly discusses the major issues that have arisen concerning the program. Part 3, Overview of Planning Guidelines, provides a brief discussion of major features of the Draft guidelines for areawide waste treatment management. Part 4 is a conclusion.

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FOREWORD

This Executive Summary is intended to provide a brief review of major elements of the 208 program. It should not be viewed as a substitute for more detailed publications on the program distributed by the Agency. The primary objective of this summary is to inform the reader regarding the major program elements.

To that end, this summary consists of four parts. Part I, Program Overview, provides a brief discussion of the program's goal, its applicability to specific problems and areas, and its major features. Part II, Issues, briefly discusses the major issues that have arisen concerning the program. Refinements to Agency policy on these issues will be made as the program further develops. Part III, Overview of Planning Guidelines, provides a brief discussion of major features of the Draft Guidelines for Areawide Waste Treatment Management. These guidelines were recently published by EPA to assist designated local planning agencies in developing an areawide plan and implementation program. This discussion of the guidelines should give the reader insight into the nature of areawide planning and management under the 208 program. Part IV is the Conclusion.

Mark Pisano

I. Program Overview

Goal. Areawide waste treatment management planning is designed to attain water quality goals of the Federal Water Pollution Control Act Amendments of 1972. A primary goal of the Act is to achieve by 1983 a level of water quality that will support aquatic life and recreation in and on the Nation's waters. Areawide planning and management efforts under Section 208 of the Act will focus on sources of pollution which threaten achievement of this 1983 goal.

Program Applicability. Areawide planning and management for designated areas is intended to address in an integrated manner difficult urban/industrial point source pollution problems, severe nonpoint source pollution problems, and associated management problems of an area. Such planning and management is to be utilized within designated areas where base level technological solutions to pollution problems cannot achieve water quality goals, or where such solutions fail to be the most cost-effective solutions to the problems. The technological remedies referred to here are waste water treatment plants and related facilities. The Act makes other provisions, e.g. Facilities Planning under Section 201, for localities where these kinds of remedies are sufficient to solve pollution problems.

In determining whether areawide planning and management mechanisms are appropriate for an area in order to address water quality problems and achieve the above 1983 goal of the Act, decision-makers should consider the following questions:

- Does the area have difficult urban/industrial pollution problems? (point source problem)

- Does the area have severe pollution problems emanating from diffuse sources, e.g. highway runoff? (nonpoint source problem)

- Does the area have a severe groundwater problem resulting from pollution generated in the area?

If an area has any of the problems listed above, consideration should be given to the following questions:

- Do current plans and proposals address each relevant problem?

- Are there institutional constraints prohibiting effective solution of the problems?

- Can each municipality acting alone solve the pollution problems?

If decision-makers conclude that their area has these problems and lacks effective solutions through existing or proposed programs, then an areawide planning and management approach should be considered. Section 208 of the Act provides the funds and the mechanisms for this approach.

Program Features. In September 1973, the United States Environmental Protection Agency published Planning Area and Agency Designation Regulations in the Federal Register (40 CFR Part 126). These regulations set forth criteria which planning areas and agencies would have to satisfy to be eligible for a 208 designation. In May of 1974, the Agency published Interim Grant Regulations (40 CFR Part 35, Subpart F) which establish procedures for the preparation and approval of grant applications, and describe required plan contents and the process of plan submittal and review. Also in May of 1974, the Agency distributed Draft Guidelines for Areawide Waste Treatment Management Planning. The guidelines are for use by planning agencies and other organizations involved in the 208 planning process.

1. Designation Factors. Pursuant to the Act and the Planning Area and Agency Designation Regulations, Section 208 areas and agencies are to be designated by the governor of a state or, in some instances, by local elected officials of the area. In intrastate areas, the governor has three options: he may choose, after consultation with local officials, to designate, nondesignate, or remain silent. E.P.A. has encouraged governors to either designate or nondesignate. If he chooses to remain silent in regard to an area, local elected officials of the area may designate their area and seek approval directly from E.P.A. Although there is no appeal from nondesignation by a governor, nondesignation does not preclude later designation of the area by the governor. In interstate areas, the governor does not have the option of nondesignation. After appropriate local consultation, he must either designate or remain silent. If he chooses the latter course, local officials can seek designation approval as part of the interstate planning area.

In order to be designated, an area must meet the criteria specified in the Area and Agency Designation Regulations. In keeping with these regulations, a preference will be given to areas of urban/industrial concentration with substantial water quality problems. This preference, however, does not preclude non-urban/industrial areas from being designated under the Act. If an area is nonurban but has a substantial water quality problem which could best be addressed by a local agency, the area can be designated. A substantial water quality problem, in this regard, would be such that a substantial percentage of stream segments in the area are water quality limited with many point and nonpoint sources of pollution. Alternatively, if the area is not an urban/industrial concentration, but one in which high quality waters exist and are threatened by development, the area can also be designated as a Section 208 area. However, provision for non-degradation of the waters in the area must explicitly and without qualification be included in the state's water quality standards, and such non-degradation of the area's water must be adopted as the 208 planning goal.

In addition to the above criteria, local governments within the 208 planning area must either have in operation a coordinated waste treatment system or show their intent, through adopted resolutions of agreement, to join together to take part in the 208 planning process in order to develop a water quality management plan which will result in a coordinated waste treatment management system for the area.

2. Water Quality Management Plan. The Act and Interim Grant Regulations prescribe that designated planning agencies are to develop a water quality management plan for: (1) municipal and industrial point source waste systems including storm and combined sewer discharges, (2) pollution emanating from diffuse sources, (3) protection of ground water, and (4) pollution resulting from disposal of residual wastes. The plan is to be cost-effective (minimum resource, social and environmental cost) and implementable. The plan must consider non-structural techniques for control and abatement of pollution, including control of the use of land where applicable. The planning horizon for these plans is twenty years; however, plans must be dynamic and capable of meeting near term goals and objectives as well.

3. Planning Process Framework. The Draft Guidelines for Areawide Waste Treatment Management Planning describe a planning process which may be utilized in preparing areawide water quality management plans. The planning process utilized by planning agencies should be designed to enable the systematic examination of a variety of technical and management alternatives for accomplishing water quality goals.

The basic planning features of the planning process described in the guidelines are:

A. Identification of Problems. Pollution problems should be identified in terms of their relative impact on water quality. Existing institutional problems impeding solutions of water quality problems should also be identified.

B. Identification of Constraints. Technical and management constraints should be identified.

C. Identification of Possible Solutions to Problems. All reasonable management and regulatory control methods should be identified.

D. Development of Alternative Plans. Alternative technical and regulatory control methods for municipal and industrial wastes, storm-water control, non-point source control, and growth and development should be combined into areawide plans. Comparable alternative options for the management of these plans should also be identified.

E. Analysis of Alternative Plans. The alternatives should be evaluated in terms of minimizing overall costs, maintaining environmental, social, and economic values, and assuring adequate management authority, financial capability and institutional feasibility.

F. Selection of Areawide Plan. The selection should be based upon systematic comparison of the alternatives.

G. Periodic Updating of the Plan. A specific procedure should be defined for monitoring plan effects and developing annual revisions to the plan.

Local planning agencies may use discretion in employing any logical planning process, as long as that process addresses the major issues of areawide waste management and produces an areawide plan, the contents of which are set forth below.

4. Plan Contents. The required contents of areawide water quality management plans as set forth in the grant regulations and planning guidelines include the following:

A. Identification of anticipated municipal and industrial treatment works construction over a 20 year period.

B. Definition of the waste water systems for the area including: system configurations, location and capacities of all facilities, treatment levels and types, and disposal of residual waste.

C. Identification of required urban stormwater runoff control systems.

D. Establishment of construction priorities over five and twenty year periods.

E. Establishment of a regulatory program to: (1) provide for waste treatment management on an areawide basis and for identification, evaluation, and control or treatment of all point and nonpoint pollution sources; (2) regulate the location, modification, and construction of waste-discharging facilities; and (3) assure that industrial or commercial wastes discharged into publicly owned treatment works meet applicable pretreatment requirements.

F. Identification of agencies necessary to construct, operate, and maintain facilities required by the plan and otherwise carry out the plan.

G. Identification of nonpoint sources of pollution including those related to agriculture, silviculture, mining, construction, and certain forms of salt water intrusion, and procedures and methods (including land use provisions) to control those sources to the extent feasible.

H. Processes to control the disposition of residual waste and land disposal of pollutants to protect ground and surface water quality.

I. Selection of a management agency(s) and institutional arrangements to implement the plan, and identification of the major management alternatives (including enforcement, financing, land use and other regulatory measures and associated management authorities and practices).

J. A schedule for implementing all elements of the plan, including identification of the monetary costs and economic, social and environmental impact of implementation.

K. Required certifications relating to consistency with other plans and to public participation in the planning process and plan adoption.

L. Recommendations of appropriate local governing bodies as to state certification and EPA approval of the plan.

5. Financial Assistance. Financial assistance is provided to designated planning agencies for a period of up to 24 months to develop an initial plan for the area. For obligations made during FY 1974 and FY 1975, the Federal share will be 100 percent of the eligible costs of the project.

6. Plan Submittal. After review and approval by the governor of the state, areawide planning agencies are to submit the initial plan to the Environmental Protection Agency within twenty-four months after award of a planning grant. At the time of plan submission, one or more areawide waste treatment management agencies must be designated to implement the plan and to receive Federal construction grants under Title II of the Act.

7. Coordination With Other Planning Activities. Areawide waste treatment management planning is to be coordinated with other provisions of the Act such as facilities planning, basin planning, permits, and State environmental program provisions. Areawide planning and management activities are also to be coordinated with other planning programs in the area that impact upon or that are impacted by water quality. Of particular interest are Corps of Engineers Urban Studies, Coastal Zone Management Plans, air, solid waste, water supply, and other resource management programs of the area.

8. Public Participation. Given the scope and detail of areawide waste treatment management planning, an active program of public participation is to be initiated in each designated area for the purpose of encouraging citizens to participate in such activities as the following:

- designation of planning areas and agencies
- development of the areawide planning process
- defining goals
- establishing priorities
- understanding land use - water quality relationships
- selection and implementation of the final areawide waste treatment management plan

The views of community residents regarding areawide planning and management issues will be of critical importance in formulating alternative technical and management plans, and in implementing any selected plan.

II. Issues

Many issues have arisen concerning various aspects of this program. Major issues that have been addressed include the following.

Institutional Arrangements. The issue has been raised of what the impact of areawide waste treatment management planning would be on traditional state and local institutional relationships. Two major concerns are most often raised in this regard. The first is whether or not traditional powers of either state or local governments will be weakened through a shift in authority between the levels of government as a result of Section 208 requirements. The second major concern is whether Section 208 of the Act would necessitate the creation of a new intermediate level of government that would radically change traditional relationships.

The Environmental Protection Agency does not view Section 208 of the Act as the mechanism to reorganize state and local government. The Agency believes that one important consequence of areawide waste treatment planning and management will be increased cooperation between state and local governments, and among local governments, on water quality concerns. Each level of government has a vital role to fulfill in 208 planning and management in order to achieve the 1983 goal of the Act. For example, data from the state basin planning program as well as state authority through the permit program will provide inputs and a framework for local 208 agencies conducting areawide planning and management. The planning process and the areawide water quality management plan developed by the local agencies will utilize both state and local institutional and financial arrangements in meeting requirements of the Act. Radical changes in traditional powers and relationships are not required.

Local institutional arrangements stimulated by areawide planning and management should be such that the most cost-effective solution to areawide water quality problems will be implemented. The arrangements should be feasible and practical extensions of existing institutional situations. Although the Act requires a single planning agency for the planning area, that designated agency must include elected representatives of the area. The management agency(s) and institutional structure that will be charged with implementing the plan must be politically feasible. Given the great diversity in local institutions around the country, the implementation of the 208 plan may involve several levels of government and a variety of existing or newly created agencies and intergovernmental arrangements.

Land Use. What is the relationship of land use to Section 208? Land use consideration for areawide waste treatment management planning should identify: (1) relationships between land use and water quality and (2) land use controls which local governments and the management agency(s) can utilize as an aid in achieving water quality goals.

Implementing Section 208 of the Act requires a regulatory program to regulate the location of all facilities that have an impact on water quality and to control the discharge of all point and nonpoint sources of pollution. The term facilities includes any controllable source of pollutants, the regulation of which contributes to attaining water quality standards. Land use control is fundamental to this regulatory program. For example, land use controls can be utilized as a cost-effective means of reducing investment in point and nonpoint source controls. Thus, land use planning and controls may be viewed as integral parts of areawide planning and management.

Land use planning and controls are traditionally the responsibility of local units of government. Planning and management activities related to land use that are carried out under Section 208 are to use existing land use plans and measures whenever possible. In some cases it will be necessary to update existing plans to reflect and help attain water quality objectives. It is possible that some jurisdictions within the 208 area will not have land use plans and/or controls. In this case, the 208 agency should work with the appropriate jurisdiction to gather enough information about the area so that current and future development patterns and policies can be identified and, if necessary, updated to incorporate water quality objectives.

Development Policy. What is the relationship of development policy to Section 208? Areawide planning and management does not imply a growth ceiling. Growth and development policy is a local decision. However, the development patterns stemming from these policies must be consistent with water quality goals and requirements. Thus, it may be necessary to consider alternative development patterns which may lend themselves to a more cost-effective water quality management plan.

Relationship of Areawide and Facilities Planning. Considerable confusion seems to exist with regard to the relationship of areawide and facilities planning activities within designated areas. The general division of responsibilities between these two programs is as follows:

- The selection of wastewater systems and service areas for the total area, location and capacities of all facilities, treatment levels and the preliminary identification of treatment types, and an overall plan for disposal of residual wastes will be included in the areawide planning.

- The preliminary designs and studies related to the approved plan including sewer evaluation surveys, detailed surface and subsurface investigations of sites of individual facilities, and preliminary design and detailed cost-effectiveness studies including the environmental assessment of individual facilities will be accomplished under facilities plans under Step 1 grants.

At the discretion of the Regional Office, some modification of this division of program responsibilities may be warranted on a case by case basis. It is recognized that facilities planning activities will likely be underway at the time areawide planning begins. Furthermore, new facilities planning starts may be scheduled during the areawide planning period. Those ongoing and new facilities planning activities should continue as planned to support the timely construction of wastewater treatment works. Obviously, those areawide and facilities planning activities should be closely coordinated to avoid unnecessary fragmentation and duplication of effort. The designated planning agency must exert leadership in such coordination.

208 Planning in Areas Not Designated. What is the state's responsibility in areas not designated? EPA policy is still being defined regarding this issue. The Act is clear that in areas not designated where 208 type planning is necessary to meet water quality standards, the state must act as the planning agency for the area. States cannot receive 208 funds to conduct such planning. Funding may be available through the State Program Grants authorized under Section 106 of the Act. It is the Agency's general policy position that this planning should be an element of the basin planning process. It must be consistent with the regulations and guidelines applicable to this process, but must also reflect the requirements governing 208 planning in designated areas when water quality problems are complex. The state can conceivably subcontract planning responsibilities to sub-state and local units of governments.

Specific questions still to be clarified include: (1) funding support, (2) the extent of land use considerations, (3) planning for interstate areas not designated, and (4) institutional and political considerations. Guidance on these matters will be available in the near future.

III. Overview of Planning Guidelines

Draft Guidelines for Areawide Waste Treatment Management Planning have recently been issued by EPA for assistance to 208 planning agencies. Some program features discussed in Part I of this executive summary are presented in detail in these guidelines. Major subjects addressed in the guidelines include the areawide planning process, technical planning, point and nonpoint source sub-plans, management planning, combined plan evaluation and selection, citizen participation, and plan submittal and approval. These subjects are briefly discussed below.

Planning Process. The purpose of the areawide planning process is to formulate an implementable areawide water quality management plan. The planning process must integrate both technical needs for pollution control and management arrangements capable of implementing the controls. Activities undertaken in an areawide waste treatment management planning process would include: basic data gathering and analysis, i.e., water quality data; projections of future population, employment, and land use activities; a land use analysis to delineate land use and water quality relationships; development of waste load allocations for alternative plans consistent with water quality standards; development of point source and nonpoint source subplans; management analysis for the area and development of alternative management plans consistent with technical plans; combining alternative plans and selecting an areawide water quality management plan.

The flow chart (p. 14) displays a simplified version of the basic planning process presented in the guidelines. Areawide planning agencies may use discretion in employing any logical planning process, as long as that process addresses major issues of areawide waste treatment management and produces an areawide plan the content of which is set forth in the Interim Grant Regulations.

Technical Planning. Technical planning for areawide waste treatment management is concerned with identifying the priority water quality problems of the area, recognizing any constraints in dealing with the problems, and developing alternative strategies for pollution control. The control strategies may be a combination of controls on municipal waste water systems, industrial effluents, nonpoint sources, and land use and growth where feasible. The framework under which technical planning is carried out consists primarily of the point source sub-plan and nonpoint source sub-plan elements of the areawide plan.

Key Sub-Plans. The key sub-plans which are fundamental building blocks of the areawide plan are the point source control plans and nonpoint source control plans mentioned above.

1. The point source control plan should provide a systematic evaluation and selection of alternative pollution control strategies for all point sources of pollution in the area. The guidelines describe detailed planning considerations

that should be addressed in establishing alternative sub-plans for control of point sources of pollution. The point sources considered are discharges from municipal treatment plants, combined sewer overflows, separate storm sewer discharges, and industrial waste effluents. Disposal of residual wastes, particularly wastewater sludge, and waste water reuse considerations are also discussed.

In development of the point source control sub-plan, and in evaluating alternative point source sub-plans, balanced consideration of measures other than the traditional capital intensive approaches is to be emphasized. Consideration of alternatives should encompass all applicable structural and management measures for preventing, abating, reducing, storing, treating, separating, recycling, reclaiming, and disposing of municipal and industrial waste waters and storm water discharges.

2. The nonpoint source control plan should identify major nonpoint sources of pollution, evaluate their impact on water quality, and delineate measures for their control. Although the Act does not specifically define nonpoint sources of pollution, they are, by inference, sources of diffuse runoff, seepage and percolation contributing to the degradation of the quality of surface waters and groundwater. Major sources of nonpoint pollution in most urban areas are runoff, construction activity, hydrographic modification, and land and subsurface disposal of residual waste. Other nonpoint sources may result from agriculture, mining, silviculture, and salt water intrusion.

Management Planning. Management planning should be conducted concurrently with technical planning. All components of the areawide plan are meant to be implemented and therefore depend upon the development of an effective management program for their implementation. The Act requires that authority to implement the areawide plan be vested in a designated agency or agencies within the 208 area. The purpose of management planning is to select a management agency(s) and to develop appropriate institutional arrangements through which the plan can be implemented. To insure plan implementation, the management agency(s) and supporting institutional arrangements selected must be capable of fulfilling the responsibilities delineated in the Act. The criteria that should be used to determine whether agencies and arrangements can properly carry out responsibilities are: adequate legal authority, adequate financial capability, practicality, coordinative capacity, and public accountability.

A management analysis should be undertaken as a first step in management planning to evaluate the existing capability within the area to meet management requirements of the Act, and to develop an understanding of what is needed to satisfy these requirements.

Upon completion of the management analysis, alternative management plans are to be developed reflecting the results of the analysis. The management plans should be developed consistent with the criteria previously mentioned for management agencies and institutional arrangements as well as with the alternative technical plans.

Combined Plan Evaluation and Selection. The technical and management planning components are to be conducted in such fashion as to result in a series of alternative technical plans for which an alternative management plan has been developed to implement the technical plan. The technical and management plans are combined to form alternative areawide water quality management plans.

Sufficient detail concerning the schedule of actions to be completed under each alternative should be provided to enable accurate evaluation of the plan in terms of meeting 1983 water quality goals.

To enable comparison of alternative plans and selection of an areawide plan, the following information on effects of alternative plans should be assembled:

1. Contribution to Water Quality and Other Related Water Management Goals of the Area
2. Technical Reliability
3. Monetary Costs
4. Environmental Effects
5. Economic and Social Effects
6. Implementation Feasibility
7. Public Acceptability

After systematic comparison of alternatives and required public participation, a final areawide water quality management plan is to be selected which is cost-effective and implementable.

Citizen Participation. The guidelines present mechanisms and suggest a model to involve citizens in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan or program regarding Section 208 of the Act.

Plan Submittal Review and Approval. Each designated 208 planning agency must submit its areawide water quality management plan, including recommendations for management agencies, to the appropriate EPA Regional Administrator within 24 months after the award of a planning grant. The plan must be submitted to EPA through the governor of the state. Included in the state review and certification of the plan should be gubernatorial implementation recommendations acknowledging that the certified 208 plan will be an operational part of the state's program for water pollution control, i.e., plan contents will be reflected in permits, construction grants program, etc. If there are unresolved differences between state and local officials at the time state comments are forwarded to EPA, the Regional Administrator of EPA will resolve the differences.

The submittal, review and approval steps are the following:

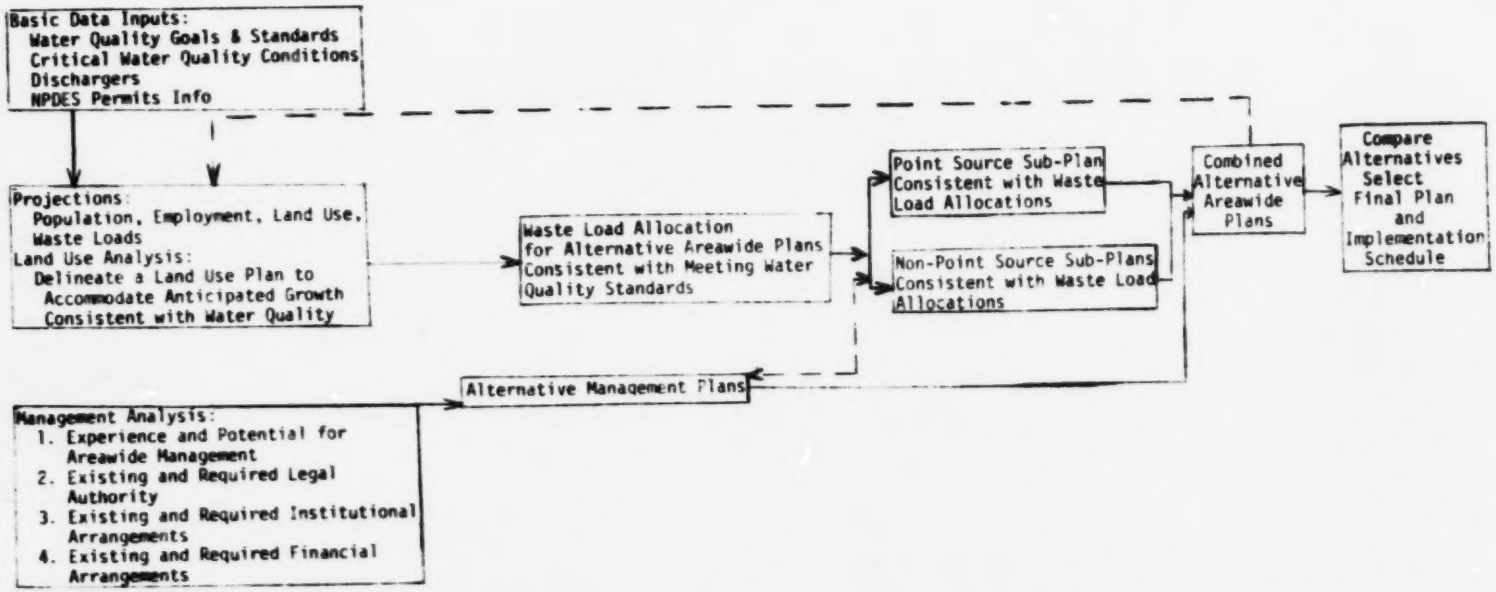
- Local Review and Recommendation
- State Review and Certification of Approval
- EPA Review and Approval

IV. Conclusion

This summary has briefly discussed the program's goal, applicability, and major features. It has provided the reader with a response to some of the major issues concerning the program, as well as an overview of recently distributed areawide planning guidelines.

Inquiries concerning this program should be addressed to the Regional Administrator of the Environmental Protection Agency in your region.

PLANNING PROCESS


Basic Data Inputs:
Water Quality Goals & Standards
Critical Water Quality Conditions
Dischargers
NPDES Permits Info
Projections:
Population, Employment, Land Use, Waste Loads
Land Use Analysis:
Delineate a Land Use Plan to Accommodate Anticipated Growth Consistent with Water Quality
Waste Load Allocation for Alternative Areawide Plans Consistent with Meeting Water Quality Standards
Point Source Sub-Plan Consistent with Waste Load Allocations
Non-Point Source Sub-Plans Consistent with Waste Load Allocations
Combined Alternative Areawide Plans
Compare Alternatives Select Final Plan and Implementation Schedule
Alternative Management Plans
Management Analysis:
1. Experience and Potential for Areawide Management
2. Existing and Required Legal Authority
3. Existing and Required Institutional Arrangements
4. Existing and Required Financial Arrangements